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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/651,588	08/29/2003	Bakul Shah	SOLID-P002	9283
<div>7590 12/28/2007 Fernandez &amp; Associates, LLP PO Box D Menlo Park, CA 94026-6402</div>			<div>EXAMINER SMITHERS, MATTHEW</div>	
			<div>ART UNIT 2137</div>	<div>PAPER NUMBER</div>
			<div>MAIL DATE 12/28/2007</div>	<div>DELIVERY MODE PAPER</div>

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/651,588

**Applicant(s)**

SHAH ET AL.

**Examiner**

Matthew B. Smithers

**Art Unit**

2137

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 4 and 7-19 is/are rejected.
- 7) ☒ Claim(s) 2, 3, 5 and 6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 5/29/07.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Information Disclosure Statement***

The information disclosure statement filed May 29, 2007 has been placed in the application file and the information referred to therein has been considered as to the merits.

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 10-12 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 10 lacks the necessary physical articles or objects to constitute a machine or manufacture within the meaning of 35 USC 101. The claim is clearly not a series of steps or acts to a process nor is it a combination of chemical compounds to be a composition of matter. The claim appears to be nothing more than a computer program *per se*, see applicant's specification page 7, line 20 to page 8, line 2, and as such fails to fall within a statutory category.

Claim 11 lacks the necessary physical articles or objects to constitute a machine or manufacture within the meaning of 35 USC 101. The claim is clearly not a series of steps or acts to a process nor is it a combination of chemical compounds to be a

composition of matter. The claim appears to be nothing more than a computer program *per se*, see applicant's specification page 7, lines 16-19, and as such fails to fall within a statutory category.

Claim 12 lacks the necessary physical articles or objects to constitute a machine or manufacture within the meaning of 35 USC 101. The claim is clearly not a series of steps or acts to a process nor is it a combination of chemical compounds to be a composition of matter. The claim appears to be nothing more than a computer program *per se* (software library), see applicant's specification page 7, line 20 to page 8, line 2, and as such fails to fall within a statutory category.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4, 7-9, 15 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5,778,349 granted to Okonogi.

Regarding claim 1, Okonogi meets the claimed limitations as follows:

"A computer-assisted method for translating a logic module, comprising the steps of:

determining a first interface of a logic module, the first interface having a first one or more interface element names; and

generating a second interface of the logic module, the second interface having a second one or more interface element names;

wherein the generating step comprises renaming the first one or more interface element names to produce the second one or more interface element names.” see Abstract; column 3, line 40 to column 5, line 5; and Figures 3, 5 and 7.

Regarding claim 4, Okonogi meets the claimed limitations as follows:

“The method of Claim 1, wherein the renaming step comprises adding an offset to the first one or more interface element names.” see Abstract; column 3, line 40 to column 5, line 5; and Figures 3, 5 and 7.

Regarding claim 7, Okonogi meets the claimed limitations as follows:

“The method of Claim 1, wherein the logic module comprises an operating system and the first interface comprises a set of system calls of the operating system.” see Abstract; column 3, line 40 to column 5, line 5; and Figures 3, 5 and 7.

Regarding claim 8, Okonogi meets the claimed limitations as follows:

“A computer-assisted method for translating a user module, comprising the steps of:

determining a first user module and a translation, the translation mapping a first provider interface to a second provider interface; and

generating a second user module according to the translation; wherein the generating step comprises replacing a first reference in the first user module to an element in the first interface with a second reference to an element in the second interface according to the translation.” see Abstract; column 3, line 40 to column 5, line 5; and Figures 3, 5 and 7.

Regarding claim 9, Okonogi meets the claimed limitations as follows:

"The method of Claim 8, wherein the first provider interface comprises a set of system calls of an operating system, the second provider interface comprises a translated set of system calls of the operating system, the first user module comprises a software application referencing the first provider interface, and the second user module comprises a translated software application referencing the second provider interface." see Abstract; column 3, line 40 to column 5, line 5; and Figures 3, 5 and 7.

Regarding claim 15, Okonogi meets the claimed limitations as follows:

"A method for processing a file access request, comprising the steps of:

receiving a file access request having a first string; and

translating the first string to a second string, the second string indicating a file wherein the translating step proceeds according to a file name translation table." see Abstract; column 3, line 40 to column 5, line 5; column 7, line 39 to column 8, line 10; and Figures 3, 5, 7 and 8.

Regarding claim 16, Bond meets the claimed limitations as follows:

"A method for providing access to a file system, comprising the steps of:

receiving a file access request; and processing the request;

wherein the file access request comprises a file name and a first file name extension, the processing step comprises translating the first file name extension to obtain a second file name extension and providing access to a file indicated by the file name and the second file name extension." see Abstract; column 3, line 40 to column 5,

line 5; column 7, line 39 to column 8, line 10; and Figures 3, 5, 7 and 8.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 7-10, and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by US 6,275,938 granted to Bond et al.

Regarding claim 1, Bond meets the claimed limitations as follows:

"A computer-assisted method for translating a logic module, comprising the steps of:

determining a first interface of a logic module, the first interface having a first one or more interface element names; and

generating a second interface of the logic module, the second interface having a second one or more interface element names;

wherein the generating step comprises renaming the first one or more interface element names to produce the second one or more interface element names." see Abstract; column 5, lines 14-23 (For the present purpose . . . think codes here is to provide security . . . ); column 5, line 64 to column 6, line 22; column 8, line 12 to column 9, line 65 and Figures 1 and 4.

Regarding claim 7, Okonogi meets the claimed limitations as follows:

"The method of Claim 1, wherein the logic module comprises an operating system and the first interface comprises a set of system calls of the operating system." see Abstract;

column 5, lines 14-23 (For the present purpose . . .think codes here is to provide security . . . ); column 5, line 64 to column 6, line 22; column 8, line 12 to column 9, line 65 and Figures 1 and 4.

Regarding claim 8, Bond meets the claimed limitations as follows:

“A computer-assisted method for translating a user module, comprising the steps of: determining a first user module and a translation, the translation mapping a first provider interface to a second provider interface; and generating a second user module according to the translation; wherein the generating step comprises replacing a first reference in the first user module to an element in the first interface with a second reference to an element in the second interface according to the translation.” see Abstract; column 5, lines 14-23 (For the present purpose . . .think codes here is to provide security . . . ); column 5, line 64 to column 6, line 22; column 8, line 12 to column 9, line 65 and Figures 1 and 4.

Regarding claim 9, Bond meets the claimed limitations as follows:

“The method of Claim 8, wherein the first provider interface comprises a set of system calls of an operating system, the second provider interface comprises a translated set of system calls of the operating system, the first user module comprises a software application referencing the first provider interface, and the second user module comprises a translated software application referencing the second provider interface.” see Abstract; column 5, lines 14-23 (For the present purpose . . .think codes here is to provide security . . . ); column 5, line 64 to column 6, line 22; column 8, line 12 to column 9, line 65 and Figures 1 and 4.



Regarding claim 10, Bond meets the claimed limitations as follows:

“A computer operating system, comprising:

a first set of one or more system calls for disclosing to trusted software modules;  
and a second set of one or more dummy systems calls for trapping untrusted software modules.” see Abstract; column 5, lines 14-23 (For the present purpose . . .thunk codes here is to provide security . . . ); column 5, line 64 to column 6, line 22; column 8, line 12 to column 9, line 65 and Figures 1 and 4.

Regarding claim 13, Bond meets the claimed limitations as follows:

“A hardware processing system, comprising: a processor; and a translation table; wherein the processor fetches an instruction, decodes the instruction according to a translation stored in the translation table, and executes the decoded instruction.” see Abstract; column 5, lines 14-23 (For the present purpose . . .thunk codes here is to provide security . . . ); column 5, line 64 to column 6, line 22; column 8, line 12 to column 9, line 65 and Figures 1 and 4.

Claims 14 and 17-19 are rejected under 35 U.S.C. 102(e) as being anticipated by US 20040255161 granted to Cavanaugh.

Regarding claim 14, Cavanaugh meets the claimed limitations as follows:

“A method for generating a web page, comprising the steps of:

receiving a web page request having a first URL; translating the first URL to a second URL according to a URL translation table, the second URL indicating a first web

page, the first web page having a third one or more embedded URLs; and generating a second web page; wherein the generating step comprises replacing the third one or more embedded URLs with translated versions of said third one or more embedded URLs according to the URL translation table to obtain the second web page.” see paragraphs [0050]-[0060]; and Figures 1 and 2.

Regarding claim 17, Cavanaugh meets the claimed limitations as follows:

“A method for processing a network connection request, comprising the steps of:

receiving a network connection request having a first number; and translating the first number to a second number, the second number indicating a port number; wherein the translating step proceeds according to a port number translation table.” see paragraphs [0050]-[0060]; and Figures 1 and 2.

Regarding claim 18, Cavanaugh meets the claimed limitations as follows:

“A method for processing a network packet, comprising the steps of:

receiving a network packet, the network packet comprising a protocol type field having a first protocol type identifier; translating the first protocol type identifier to a second protocol type identifier; and routing the network packet according to a protocol indicated by the second protocol type identifier; wherein the translating step proceeds according to a protocol type field translation table.” see paragraphs [0050]-[0060]; and Figures 1 and 2.

Regarding claim 19, Cavanaugh meets the claimed limitations as follows:

“A method for processing a database command, comprising the steps of:  
receiving a database command having a first string; and  
translating the first string to a second string, the second string indicating a database keyword; wherein the translating step proceeds according to a database keyword translation table.” see paragraphs [0050]-[0060]; and Figures 1 and 2.

***Allowable Subject Matter***

Claims 2, 3, 5 and 6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

With respect to claim 2, the cited prior art fails to specifically teach the renaming step comprises generating one or more random strings as the second one or more interface element names.

With respect to claim 3, the cited prior art fails to specifically teach the renaming step comprises hashing the first one or more interface element names.

With respect to claim 5 and 6, the cited prior art fails to specifically teach the generating step further comprises adding one or more dummy interface elements to the second interface and further comprises associating one or more traps with the one or more dummy interface elements.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A. Kato et al (US 20050228990) discloses a system for safely executing software.

B. Teal et al (US 20030120935) discloses a system for providing network security.

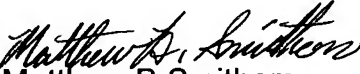
C. Oldman (US 6,769,115) discloses a system for detecting porting problems in a software development environment.

D. Adelson et al (US 5,521,849) discloses a system for operation application software in a critical environment.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew B. Smithers whose telephone number is (571) 272-3876. The examiner can normally be reached on Monday-Friday (8:00-4:30) EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel L. Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Matthew B Smithers  
Primary Examiner  
Art Unit 2137